We claim:

Sub	cin	A method for producing a precursor polymer dispersion for addition to
	2	a brine for use in drilling and completion operations comprising:
•	3	providing a precursor brine having a first salt content; and
	4	mixing a water-soluble polymer with said precursor brine at a sufficient
	5	concentration and under conditions sufficient to produce a precursor
	6	polymer dispersion effective at a sufficient concentration in a final brine
<u> </u>	7	having a second salt content to improve a property of said final brine
I	8	selected from the group consisting of rheology, fluid loss control, and
	9	combination thereof.
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]	1	2. The method of claim 1 wherein said sufficient concentration is between
	2	about 0.5-4 lb of said water-soluble polymer per gallon of said precursor brine.
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duk	Kq/	3. The method of claim 1 wherein said sufficient concentration is between
	2	about 1-2 lb of said water-soluble polymer per gallon of said precursor brine.
	1	The method of claim 1 wherein said water-soluble polymer comprises
	2	starch.
	1	5. The method of claim 2 wherein said water-soluble polymer comprises
	2	starch.

	1	6. The method of claim 3 wherein said water-soluble polymer comprises
•	2	starch.
Sut	ca	7. The method of claim 1 wherein
	2	said precursor brine comprises a salt selected from the group consisting of
	3	calcium salts, magnesium salts, sodium salts, potassium salts, aluminum
	4	salts, lithium salts, and combinations thereof; and
o T	5	said first salt content comprises a density of between about 9-14 pounds per
	6	gallon.
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o C	1	8. The method of claim 2 wherein
<u>+</u>	2	said precursor brine comprises a salt selected from the group consisting of
	3	calcium salts, magnesium salts, sodium salts, potassium salts, aluminum
	4	salts, lithium salts, and combinations thereof, and
	5	said first salt content comprises a density of between about 9-14 pounds per
	6	gallon.
Sul	0C3>	9. The method of claim 3 wherein
	2	said precursor brine comprises a salt selected from the group consisting of
	3	calcium salts, magnesium salts, sodium salts, potassium salts, aluminum
	4	salts, lithium salts, and combinations thereof; and



said first salt content comprises a density of between about 9-14 pounds per gallon.

said precursor brine comprises a salt selected from the group consisting of calcium salts, magnesium salts, sodium salts, potassium salts, aluminum salts, lithium salts, and combinations thereof; and said first salt content comprises a density of between about 9-14 pounds per

gallon.

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11. The method of claim 1 wherein

The method of claim 6 wherein

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said precursor brine comprises a salt selected from the group consisting of calcium chloride, calcium bromide, and combinations thereof; and said first salt content comprises a density of between about 9-14 pounds per

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12. The method of claim 2 wherein

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said precursor brine comprises a salt selected from the group consisting of calcium chloride, calcium bromide, and combinations thereof; and said first salt content comprises a density of between about 9-14 pounds per

4 5

gallon.

gallon.

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7	13. The method of claim 3 wherein
8	said precursor brine comprises a salt selected from the group consisting of
9	calcium chloride, calcium bromide, and combinations thereof, and
10	said first salt content comprises a density of between about 9-14 pounds per
11	gallon.
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	A method for producing a precursor polymer dispersion for addition to
2	a final brine for use in drilling and completion operations comprising:
3	providing a precursor brine having a first salt content comprising a density of
4	between about 9-14 pounds per gallon of a salt selected from the group
5	consisting of calcium chloride, calcium bromide, and combinations
6	thereof; and
7	mixing between about 1-2 lb/gal of a water-soluble polymer with said precursor
8	brine under conditions sufficient to produce a precursor polymer
9	dispersion effective at a sufficient concentration in a final brine having a
10	second salt content to improve a property of said final brine selected
11	from the group consisting of rheology, fluid loss control, and a
12	combination thereof.
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1	16. A method for treating a high density brine for use in drilling and
2	completion operations comprising:
3	providing a precursor brine having a first salt content;

mixing a water-soluble polymer with said precursor brine at a sufficient concentration and under conditions sufficient to produce a precursor polymer dispersion effective at a sufficient concentration in a final brine having a second salt content to improve a property of said final brine 7 selected from the group consisting of rheology, fluid loss control, and a 8 combination thereof; and 9 mixing said sufficient concentration of said precursor polymer dispersion with 10 said final brine. 11 The method of claim 16 wherein said sufficient concentration is 1 between about 0.5-4 lb of said water-soluble polymer per gallon of said precursor 2 brine. 3 The method of claim 16 wherein said sufficient concentration is 1 between about 1-2 lb of said water-soluble polymer per gallon of said precursor brine. 2 3 The method of claim 15 wherein said water-soluble polymer comprises 1 starch. 2

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20. The method of claim 16 wherein said water-soluble polymer comprises starch.

	•	•	71	The method of claim 17 wherein said water-soluble polymer comprises
	1		۸.	The method of claim 14 wherein said water soldolo perymer comprises
*	2	starch.		
Šul	scH>		14.	
	1		22.	The method of claim 15 wherein
E C	2		said pro	ecursor brine comprises a salt selected from the group consisting of
	3			calcium chloride, calcium bromide, and combinations thereof; and
	4		said fir	st salt content comprises a density of between about 9-14 pounds per
T I	5			gallon.
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	1		23.	The method of claim 16 wherein
	2		said pr	ecursor brine comprises a salt selected from the group consisting of
	3			calcium chloride, calcium bromide, and combinations thereof; and
	4		said fir	st salt content comprises a density of between about 9-14 pounds per
	5			gallon.
	1		24.	The method of claim 17 wherein
	2		said pr	recursor brine comprises a salt selected from the group consisting of
	3			calcium chloride, calcium bromide, and combinations thereof; and
	4		said fir	st salt content comprises a density of between about 9-14 pounds per
	5			gallon

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1	25. The method of claim 18 wherein
2	said precursor brine comprises a salt selected from the group consisting of
3	calcium chloride, calcium bromide, and combinations thereof; and
4	said first salt content comprises a density of between about 9-14 pounds per
5	gallon.
1	26. The method of claim 21 wherein
2	said precursor brine comprises a salt selected from the group consisting of
3	calcium chloride, calcium bromide, and combinations thereof, and
4	said first salt content comprises a density of between about 9-14 pounds per
5	gallon.
u	27. A precursor polymer dispersion for addition to a final brine for use in
2	drilling and completion operations comprising:
3	a first salt content;
4	a water-soluble polymer in an amount effective at a sufficient concentration in a
5	final brine having a second salt content to improve a property of said

control, and a combination thereof.

final brine selected from the group consisting of rheology, fluid loss

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